SPECIFICATION

Please amend the specification as follows:

Title:

URINARY DIAGNOSTIC SYSTEM HAVING A RETRIEVABLE SENSING DEVICE

Paragraph [0026]:

FIG. 2 illustrates a first embodiment of a urinary diagnostic system 24. The system 24 includes a processing device ~~processing device~~26 that receives and records signals generated by sensing device 28. In this embodiment, transfer of the measurement is by radio frequency, although other methods are contemplated. The sensing device 28 includes a sensing element (See FIG. 3) that detects changes in pressure and a transmitter or transceiver system (See FIG. 3) for communicating measurements to the processing device 26. A suitable sensing device includes, but is not limited to, thermal sensing devices, conductive sensing devices, capacitive sensing devices, inductive sensing devices, resistive sensing devices, optical pressure sensing devices, and the like. Any of these sensing devices can be easily integrated into a thin (i.e., less than about 0.5 mm) assembly.

Paragraph [0037]:

FIG. 5 illustrates a cross section of the retrieval wire 32 having a multi-wire assembly that includes an antenna conductor 70 and electrodes 72 used by the processing device 28 to detect urine flow. As urine flows past the electrodes 72, the change in capacitance (and/or resistance) can be detected. In a preferred embodiment, a hydrophobic biocompatible polymer encapsulates the antenna conductor 70. The electrodes 72 are also encapsulated by the hydrophobic biocompatible polymer in order to reduce the risk of false readings due to trapped urine. Other materials for encapsulating the electrodes include, but are not limited to, polyethylene, polyurethane, polytetrafluoroethylene or Teflon®, and the like. In this multi-sensing device embodiment, the processing device 26 acquires the change in capacitance (and/or resistance) measurements continuously. The ~~two~~ multi-sensing device measurements can be time multiplexed or frequency multiplexed by the sensing device electronics.

Paragraph [0041]:

The alarm function of the processing device 26 can provide the user with feedback about excessive bladder pressure or a leak of urine. Biofeedback is an effective tool in treating incontinence. Data stored in the receiver can be transferred to a separate unit for printing and analysis. The data transfer can be by direct electrical cable connection (e.g., USB interface) or wireless communication (e.g. ~~Bluetooth~~ BLUETOOTH® standard).

Paragraph [0044]:

FIG. 8 illustrates the sensing device 28 that is prepared for delivery 100 in the bladder 12. A mechanism (or disposer or catheter-type device) is utilized to dispose the sensing device 28 into the bladder 12. The sensing device 28 and the housing 30 are enclosed within a flexible sheath 102 that has been inserted into the urethra 22. The sheath 102 has forced the housing 30 into a closed configuration that minimizes the diameter of the sensing device 28. A hollow push rod or (trocar mechanism) 104 is positioned distal to the sensing device 28 with the retrieval wire 32 contained within the rod lumen (or interior) 106. The hollow push rod 104 can be manufactured of any biocompatible material such as polyethylene, polyurethane, steel, polytetrafluoroethylene or Teflon®, and the like. In normal use, the sheath 102 is inserted into the urethra ~~24~~ 22 and the distal tip 108 of the sheath 102 is positioned within the bladder 12. The user can easily detect, by tactile feedback, when the distal tip 108 of the sheath 102 enters the bladder 12.

Paragraph [0050]:

In an alternative embodiment of the sheath (e.g., ~~112~~ 102 and ~~120~~ 122), optical fibers (not shown) are integrated into the wall of the sheath and are used to detect when the distal tip enters the bladder. An example of suitable optical technology is described in U.S. Patent No. 5,303,026 to Bigio et al. When utilizing optical fibers integrated into the sheath, other properties of the tissue (e.g., blood volume, blood oxygenation, muscle thickness, and the like) can be measured.